

Title (en)

Method and system for performance testing of rotating machines

Title (de)

Verfahren und System zur Leistungsprüfung von rotierenden Maschinen

Title (fr)

Méthode et système d'essai de performance de machines tournantes

Publication

**EP 1103815 A3 20021204 (EN)**

Application

**EP 01100141 A 19990601**

Priority

- EP 99923842 A 19990601
- IL 12493298 A 19980616

Abstract (en)

[origin: WO9966335A1] A method for measuring an angular rotation of a rotating shaft, comprising the steps of attaching to the shaft a digital rotary encoder which generates successive HIGH and LOW logic levels during respective successive time intervals. The shaft is rotated and the respective time periods of each successive logic level generated by the digital rotary encoder are accumulated so as to allow derivation of the angular rotation or a function thereof of the shaft. Such a method produces accurate results regardless of tolerance errors in the duty cycle of the encoder. This may be used for testing a performance of a rotating machine or of a component thereof in order to derive a speed-time characteristic of the rotating machine or a function thereof. Owing to the inherent high measurement resolution of the invention, dynamic performance may be determined accurately as well as steady-state performance without the need to slow down the machines speed of rotation by use of a flywheel.

IPC 1-7

**G01P 3/489**; **G01R 31/34**; **G01L 3/00**

IPC 8 full level

**G01D 5/244** (2006.01); **G01D 5/245** (2006.01); **G01L 3/00** (2006.01); **G01L 3/22** (2006.01); **G01M 99/00** (2011.01); **G01P 3/489** (2006.01); **G01P 21/02** (2006.01); **G01R 31/34** (2006.01); **H02P 29/00** (2016.01)

CPC (source: EP KR US)

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Citation (search report)

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**WO 9966335 A1 19991223**; AT E292804 T1 20050415; AU 4056999 A 20000105; AU 748970 B2 20020613; BR 9911338 A 20010313; CA 2334962 A1 19991223; CN 1149399 C 20040512; CN 1310800 A 20010829; CN 1497257 A 20040519; DE 69924609 D1 20050512; DE 69924609 T2 20060302; EP 1088237 A1 20010404; EP 1088237 B1 20050406; EP 1103815 A2 20010530; EP 1103815 A3 20021204; ES 2243058 T3 20051116; HK 1035401 A1 20011123; HU P0104326 A2 20020328; HU P0104326 A3 20020528; IL 124932 A0 19990126; JP 2001324395 A 20011122; JP 2002518681 A 20020625; KR 100710761 B1 20070424; KR 20010071503 A 20010728; MX PA00012588 A 20020508; PL 345001 A1 20011119; RU 2229135 C2 20040520; TR 200003747 T2 20010321; TR 200100035 T2 20010921; US 6591200 B1 20030708

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